



October 21, 1999

## PVI (Photovoltaics International)

**For Immediate Release**

PVI demonstrates advanced solar concentrators at the Sacramento Municipal Utility District.

PVI's SunFocus Power System™ uses one-tenth the silicon cells of traditional solar technology.

**Sacramento, CA, October 20, 1999:** PVI (Photovoltaics International) of Sunnyvale, CA takes a giant step towards being a leading supplier/manufacturer of solar energy systems. Today PVI and the Sacramento Municipal Utility District (SMUD) unveiled PVI's SunFocus Power System™ installation, located atop the SMUD 59<sup>th</sup> Street warehouse. SMUD has always been a leader in renewable energy – solar energy systems in particular. Now they have taken another visionary step forward by demonstrating an advanced photovoltaic concentrator.

The 30-plus kilowatt system will provide cleaner, greener power to SMUD customers and enough electricity to power 10 homes. "The SunFocus Power System™ will benefit SMUD and its customers by providing power at peak load times," said Neil Kaminar, PVI vice president of engineering. "Using this solar technology will cut the amount of electricity that must be generated at high energy demand times."

Solar concentrators are just now beginning to stand out as a key technology for making solar electric power a lower-cost option. “Concentrators track the sun to provide more energy per day,” said Dr. Chris Sherring, PVI president.

The SunFocus Power System™ starts producing power earlier in the morning and works later in the afternoon, producing more useable power on an average day than conventional photovoltaic technology. Yet they use one-tenth the silicon of conventional solar electric technology. “This allows concentrators to cost less,” said Dr. William Bottenberg, PVI vice president of product development. “With less silicon used, it is possible to expand concentrator production at a much lower cost than flat plate production.”

PVI’s solar energy system will have an output of 30 kilowatts of AC power. The summertime output of the SunFocus Power System™ will provide a good match with SMUD peak loads. “PVI has worked long and hard to complete this project,” said Dave Collier, SMUD electrical engineer. “The project is a great example of a concentrator system that works. It helps us (SMUD) meet our mission statement by providing electricity and energy service to our customers safely, dependably and in an environmentally responsible manner.”

This project is a significant step in developing the solar energy market in northern California and enhances PVI’s reputation as a supplier/manufacturer of high-quality photovoltaic systems in this rapidly growing market. PVI is concentrating its United States efforts in the southwest region, where concentrators outperform conventional photovoltaic technology by a large margin. In the future, PVI’s goal is to expand its activities in offshore markets.

PVI has benefited from research and development assistance provided by the Department of Energy, National Renewable Energy Laboratories and other government initiatives. “These agencies are now seeing the fruits of their investments,” said Sherring. “Concentrators prove to be a key technology option for the future.”

Unlike other photovoltaic products, PVI's panels are factory-equipped with tracker, controls, support structure for mounting the concentrating modules, and a complete wiring harness to provide power to a "dc plug."

"Most manufacturers make system components. We make systems," said Kaminar.

Over the past six years, several power projects have been constructed using earlier prototypes of the SunFocus Power System™, helping to refine the design in preparation for today's product launch. The National Renewable Energy Laboratory (NREL), the California Energy Commission (CEC) and the National Institute for Science & Technology (NIST) have participated in the development of the product. However, the vast majority of the cost of developing this technology has come from private investors. PVI is majority-owned by American Consumer Industries, a privately held, environmentally-oriented independent power producer which operates biomass and waste fuel power plants, totaling over 80 megawatts of production capacity.